



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,867	10/18/2005	Tohru Kanegae	8048-1106	2253
466 7590 04/01/2009 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER DANG, HUNG Q	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 04/01/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,867	Applicant(s) KANEGAE ET AL.	
	Examiner Hung Q. Dang	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 01/27/2009 have been fully considered but they are not persuasive.

On pages 22 and 24-25, Applicant argues Saeki does not disclose "information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element," and for that reason, Saeki also does not disclose, "the sub-video control information includes ... ii) type indicating information to indicate presence or absence, or effectiveness or ineffectiveness of the control information elements by each of the types," as in claim 19; or the type indication information indicates the presence or absence, or the effectiveness or ineffectiveness of the control information elements by the unit of the sub-frame," as in claim 20." In response, the Examiner respectfully disagrees. As clearly shown at least in Fig. 14 and at column 14, lines 33-44, information on colors when the button is selected or activated is disclosed. The "selected-determined flag" is also disclosed. At least the "selected-determined flag" can indicate the effectiveness or ineffectiveness of the control information elements such as "selected color information" and "activated color information" because the "selected-determined flag" is used to determine whether the button is in a selected state or activated state (column 15, lines 35-37) so that the corresponding color information can be used to display the button correctly (column 14, lines 33-50). Specifically, if the flag indicates it is a selected state, the "selected color information" is effective. Otherwise,

Art Unit: 2621

the information is ineffective. Likewise, if the flag indicates it is in activated state, "activated color information" is effective. Otherwise, the information is ineffective.

For that reason, the rejections stand as previously presented.

Information Disclosure Statement

The information disclosure statement filed 04/01/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-43 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- of U.S. Patent No. 10/530033 in view of Saeki et al. (US Patent 6,067,400).

Regarding claim 18 of this application, claim 1 of application no. 10/53003 recites “an information record medium comprising: video information to indicate a main video; sub-video information to indicate a sub-video, the sub-video at least partially displayable over the main video; predetermined part coordinate information to designate coordinates of a predetermined part included in the sub-video, in a coordinate system defined with respect to the sub-video; and sub-video control information, which corresponds to the sub-video control information recited in claim 18 of this application, including: coordinates-before-movement information to indicate coordinates of a sub-frame before a movement in the coordinate system, the sub-frame being at least an area of the sub-video, and coordinates-after-movement information to indicate coordinates of the sub frame after n-th movement (n is a natural number equal to or more than 1) in the coordinate system, which corresponds sub-video, which correspond to (i) a control information element for display control of the sub-video information in a method set in advance recited in this application.

However, claim 1 of application no. 10/53003 does not recite “information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element.”

Saeki et al. disclose “information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element” (column 14, lines 1-

Art Unit: 2621

15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 26-30; also see “Response to Arguments” above).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element disclosed by Saeki et al. into the information record medium recited by claim 1 of application no. 10/530033 in order to keep track of the status of the control information elements so that it can dynamically control the display of the sub-video data using a minimum amount of management data.

Regarding claim 19 of this application, Saeki et al. also disclose the sub-video control information includes (i) a plurality of types of control information elements for display control of the sub-video information in various methods set in advance (Fig. 14; column 15, lines 21-34; column 19, lines 57-62; column 20, lines 14-17) and (ii) type indicating information to indicate presence or absence, or effectiveness or ineffectiveness of the control information elements by each of the types (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 1-7, 26-30; also see “Response to Arguments” above).

Regarding claim 20 of this application, claim 1 of application no. 10/530033 recites, “coordinates-before-movement information to indicate coordinates of a sub-frame before a movement in the coordinate system, the sub-frame being at least an area of the sub-video, which corresponds to sub-frame range information to specify at least a partial area of the sub-video as a sub-frame recited in this application, and

Art Unit: 2621

coordinates-after-movement information to indicate coordinates of the sub frame after n-th movement (n is a natural number equal to or more than 1) in the coordinate system,” which corresponds to the control information element comprises information for controlling the sub-video information by a unit of the sub-frame, and Saeki et al.

disclose “and the type indication information indicates the presence or absence, or the effectiveness or ineffectiveness of the control information elements by the unit of the sub-frame” (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 26-30; also see “Response to Arguments” above).

Regarding claim 21 of this application, Saeki et al. also disclose the type indication information comprises table information including one bit of information by each of the types (Fig. 13; Fig. 14; column 14, lines 1-15).

Regarding claim 22 of this application, Saeki et al. also disclose the table information includes extension bit information which is not associated with the types (“reserve” area in Fig. 13), and a part occupied by the control information elements in the sub-video control information is variable-length (column 13, lines 59-61).

Regarding claim 23 of this application, claim 1 of application no. 10/530033 recites, “coordinates-before-movement information to indicate coordinates of a sub-frame before a movement in the coordinate system, the sub-frame being at least an area of the sub-video, and coordinates-after-movement information to indicate coordinates of the sub frame after n-th movement (n is a natural number equal to or more than 1) in the coordinate system.”, which corresponds to the control information

Art Unit: 2621

element includes dynamic control information to display the sub-video information dynamically recited in this application.

Regarding claim 24 of this application, Saeki et al. also disclose the control information element includes shading-display control information to selectively shade an opaque part out of the sub-video and display it over the main-video (column 17, lines 19-26; Fig. 12; Fig. 14).

Regarding claim 25 of this application, claims 2 and 6 of application no. 10/530033 respectively recite, “the predetermined part is a button video part, and the predetermined part coordinate information is button position information to indicate coordinates of the button video part,” which corresponds to (i) button information which defines at least a part of the sub-video which is to be displayed over the main-video, as a button video part which functions as a button, and “high light information to define how to control a high light display for the button video part,” which corresponds to (ii) highlight information which defines how to perform highlight-display control over the button video part recited in this application.

Regarding claim 26 of this application, claim 8 of application no. 10/530033 recites, “a sub-video information set comprises the sub-video information and the predetermined part coordinate information, and the main video information, the sub-video information set, and the sub-video control information are divided into predetermined packets and multiplexed, and further streamed into a video stream comprising the divided main video, a sub-video stream comprising the divided sub-video

Art Unit: 2621

information set and a control information stream comprising the divided sub-video control information.”

Claim of 27 of this application is rejected for the same reason as discussed in claim 18 above in further consideration of claim 9 of application no. 10/530033.

Claim 28 of this application is rejected for the same reason as discussed in claim 19 above in further consideration of claim 9 of application no. 10/530033.

Claim 29 of this application is rejected for the same reason as discussed in claim 18 above in further consideration of claim 10 of application no. 10/530033.

Claim 30 is rejected for the same reason as discussed in claim 19 above in further consideration of claim 10 of application no. 10/530033.

Claim 31 is rejected for the same reason as discussed in claim 18 above in further consideration of claim 11 of application no. 10/530033.

Claim 32 is rejected for the same reason as discussed in claim 19 above in further consideration of claim 11 of application no. 10/530033.

Claim 33 is rejected for the same reason as discussed in claim 18 above in further consideration of claim 13 of application 10/530033.

Claim 34 is rejected for the same reason as discussed in claim 19 above in further consideration of claim 13 of application no. 10/530033.

Claim 35 is rejected for the same reasons as discussed in claim 18 above in further consideration of claim 14 of application 10/530033.

Claim 36 is rejected for the same reasons as discussed in claim 19 above in further consideration of claim 14 of application 10/530033.

Claim 37 is rejected for the same reasons as discussed in claim 18 above in further consideration of claim 15 of application no. 10/530033.

Claim 38 is rejected for the same reasons as discussed in claim 19 above in further consideration of application no. 10/530033.

Claim 39 is rejected for the same reason as discussed in claim 27 above in further consideration of claim 16 of application no. 10/530033.

Claim 40 is rejected for the same reason as discussed in claim 31 above in further consideration of claim 17 of application no. 10/530033.

Claim 41 is rejected for the same reasons as discussed in claim 35 above in further consideration of claim 18 of application no. 10/530033.

Claim 42 is rejected for the same reason as discussed in claim 18 above in further consideration of claim 19 of application no. 10/530033.

Claim 43 is rejected for the same reason as discussed in claim 19 above in further consideration of claim 19 of application no. 10/530033.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Saeki et al. (US Patent 6,067,400).

Regarding claim 18, Saeki et al. disclose a computer-readable information recording medium (Fig. 4; column 10, lines 1-17) on which there are recorded: video information to indicate a main-video (Fig. 6; column 10, line 65 – column 11, line 13); sub-video information to indicate a sub-video displayable at least partially over the main-video (Fig. 10; column 10, line 65 – column 11, line 6; column 11, lines 18-24); and sub-video control information including (i) a control information element for display control of the sub-video information in a method set in advance (Fig. 14; column 15, lines 21-34) and (ii) information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 26-30; also see “Response to Arguments” above).

Regarding claim 19, Saeki et al. also disclose the sub-video control information includes (i) a plurality of types of control information elements for display control of the sub-video information in various methods set in advance (Fig. 14; column 15, lines 21-34; column 19, lines 57-62; column 20, lines 14-17) and (ii) type indicating information to indicate presence or absence, or effectiveness or ineffectiveness of the control information elements by each of the types (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 1-7, 26-30).

Regarding claim 20, Saeki et al. also disclose the sub-video control information further includes sub-frame range information to specify at least a partial area of the sub-video as a sub-frame (“start X-Y coordinates” and “end X-Y coordinates” in Fig. 14; column 15, lines 21-34); the control information element comprises information for

Art Unit: 2621

controlling the sub-video information by a unit of the sub-frame (column 14, lines 38-44; column 15, lines 44-46; column 19, lines 57-62; column 20, lines 26-30; column 21, lines 17-20; Fig. 30; Fig. 31; Fig. 33; *the sub-frame corresponds to the area that gets high-lighted*); and the type indication information indicates the presence or absence, or the effectiveness or ineffectiveness of the control information elements by the unit of the sub-frame (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 26-30).

Regarding claim 21, Saeki et al. also disclose the type indication information comprises table information including one bit of information by each of the types (Fig. 13; Fig. 14; column 14, lines 1-15).

Regarding claim 22, Saeki et al. also disclose the table information includes extension bit information which is not associated with the types ("reserve" area in Fig. 13), and a part occupied by the control information elements in the sub-video control information is variable-length (column 13, lines 59-61).

Regarding claim 23, Saeki et al. also disclose the control information element includes dynamic control information to display the sub-video information dynamically (column 13, lines 38-52; column 14, lines 40-44; column 22, lines 50-56; Fig. 30; Fig. 31).

Regarding claim 24, Saeki et al. also disclose the control information element includes shading-display control information to selectively shade an opaque part out of the sub-video and display it over the main-video (column 17, lines 19-26; Fig. 12; Fig. 14).

Regarding claim 25, Saeki et al. also disclose the control information element includes (i) button information which defines at least a part of the sub-video which is to be displayed over the main-video, as a button video part which functions as a button (Fig. 14; column 15, lines 21-34), and (ii) highlight information which defines how to perform highlight-display control over the button video part (column 19, lines 63-67; column 22, lines 50-56).

Regarding claim 26, Saeki et al. also disclose the main-video information (Fig. 8), the sub-video information (Fig. 14) and the sub-video control information (Fig. 13) are divided into predetermined packet units (Fig. 8; Fig. 9; Fig. 10; Fig. 11) and multiplexed (Fig. 6; Fig. 7), and further streamed relatively into a video stream composed of the divided sub-video information set and a control information stream composed of the divided sub-video control information (Fig. 6; Fig. 7).

Regarding claim 27, Saeki et al. disclose an information record apparatus (column 30, lines 20-40) comprising: a first record device for recording video information to indicate a main-video (Fig. 6; column 10, line 65 – column 11, line 13); a second record device for recording sub-video information to indicate a sub-video displayable at least partially over the main video (Fig. 10; column 10, line 65 – column 11, line 6; column 11, lines 18-24); and a third record device for recording sub-video control information including (i) a control information element for display control of the sub-video information in a method set in advance (Fig. 14; column 15, lines 21-34) and (ii) information to indicate presence or absence, or effectiveness or ineffectiveness of the

Art Unit: 2621

control information elements (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 26-30).

Regarding claim 28, Saeki et al. also disclose the third record device records the sub-video control information includes (i) a plurality of types of control information elements for display control of the sub-video information in various methods set in advance (Fig. 14; column 15, lines 21-34; column 19, lines 57-62; column 20, lines 14-17) and (ii) type indicating information to indicate presence or absence, or effectiveness or ineffectiveness of the control information elements by each of the types (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 1-7, 26-30).

Claim 29 is rejected for the same reason as discussed in claim 27 above.

Claim 30 is rejected for the same reason as discussed in claim 28 above.

Regarding claim 31, Saeki et al. also disclose an information reproduction apparatus for reproducing information on an information record medium (Fig. 18; Fig. 20; column 17, lines 44-61) on which there are recorded: video information to indicate a main-video (Fig. 6; column 10, line 65 – column 11, line 13); sub-video information to indicate a sub-video displayable at least partially over the main-video (Fig. 10; column 10, line 65 – column 11, line 6; column 11, lines 18-24); and sub-video control information including (i) a control information element for display control of the sub-video information in a method set in advance (Fig. 14; column 15, lines 21-34) and (ii) information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element (column 14, lines 1-15; column 19, lines 43-56, column 15,

Art Unit: 2621

lines 21-34, 42-51; Fig. 14; column 20, lines 26-30); said information reproduction apparatus comprising: a reproduction device for reproducing the video information (column 18, lines 57-64), the sub-video information and the sub-video control information (column 18, line 65 – column 19, line 12; column 20, lines 55-65); a display output device capable of displaying and outputting the reproduced sub-video information over the reproduced video information (Fig. 18; Fig. 35; column 21, lines 3-7); and a control device for controlling the display output device to display-control the sub-video information in the method and display the sub-video information over the main-video, on the basis of the control information element whose presence or effectiveness is shown by the information to indicate presence or absence, or effectiveness or ineffectiveness of the control information element which is included in the reproduced sub-video control information (column 10, line 65 – column 11, line 6; column 11, lines 18-24; column 21, lines 3-7; column 23, lines 1-19, 35-49).

Regarding claim 32, Saeki et al. also disclose the sub-video control information includes (i) a plurality of types of control information elements for display control of the sub-video information in a various methods set in advance (Fig. 14; column 15, lines 21-34; column 19, lines 57-62; column 20, lines 14-17) and (ii) type indicating information to indicate presence or absence, or effectiveness or ineffectiveness of the control information elements by each of the types (column 14, lines 1-15; column 19, lines 43-56, column 15, lines 21-34, 42-51; Fig. 14; column 20, lines 1-7, 26-30); the control device controls the display output device to display-control the sub-video information in the various methods and display the sub-video information over the main-video, on the

Art Unit: 2621

basis of the control information elements whose presence or effectiveness is shown by the type indication information which is included in the reproduced sub-video control information (column 10, line 65 – column 11, line 6; column 11, lines 18-24; column 21, lines 3-7; column 23, lines 1-19, 35-49).

Claim 33 is rejected for the same reason as discussed in claim 31 above.

Claim 34 is rejected for the same reason as discussed in claim 32 above.

Claim 35 is rejected for the same reasons as discussed in claims 27 and 31 above.

Claim 36 is rejected for the same reasons as discussed in claims 28 and 32 above.

Claim 37 is rejected for the same reasons as discussed in claims 27 and 31 above.

Claim 38 is rejected for the same reasons as discussed in claims 28 and 32 above.

Claim 39 is rejected for the same reason as discussed in claim 27 above.

Claim 40 is rejected for the same reason as discussed in claim 31 above.

Claim 41 is rejected for the same reasons as discussed in claims 27 and 31 above.

Claim 42 is rejected for the same reason as discussed in claim 18 above.

Claim 43 is rejected for the same reason as discussed in claim 19 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621